United Nations A/69/208

General Assembly

Distr.: General
30 July 2014

Original: English

Sixty-ninth session
Item 99 of the provisional agenda*
Review of the implementation of the recommendations and decisions adopted by the General Assembly at its tenth special session

Work of the Advisory Board on Disarmament Matters

Report of the Secretary-General

Summary

The Advisory Board on Disarmament Matters held its sixty-first session in New York from 5 to 7 March 2014 and its sixty-second session in Geneva from 2 to 4 July 2014. During those sessions, it focused its deliberations on the following substantive items on its agenda: (a) disarmament and security implications of emerging technologies; and (b) verification, with a special focus on new verification technologies.

The Board had an exchange of views on the first agenda item at its two sessions in 2014. With respect to unmanned aerial vehicles, commonly known as drones, the Board recommended that the Secretary-General commission a study to examine the distinction between armed/military drones and unarmed/peaceful/civilian drones, and such ideas as improving transparency in targeted unmanned aerial vehicle strikes as a confidence-building measure and developing a robust oversight and accountability mechanisms for targeted strikes outside active battlefields. The proposed study should also consider international humanitarian law and how relevant principles such as distinction, proportionality and military necessity should be applied with a view to avoiding excessive injurious or indiscriminate effects.

The Board recommended that the Secretary-General consider including in the above-mentioned study a broader range of emerging technologies that might have an impact on international security and the arms control process, including in the field of outer space. It was also recommended that the Secretary-General encourage international and regional organizations to engage in and discuss more actively the issue of emerging technologies. Furthermore, it was recommended that the

* A/69/150.

14-58496 (E) 110814

Please recycle

Secretary-General encourage Member States to take into account their responsibility and obligation to the wider international community when using emerging technologies, given the absence of international regulation in that field. In this connection, it was recommended that the Secretary-General encourage States to develop and implement inter-State transparency and confidence-building measures with regard to emerging technologies.

The Board engaged in a very active discussion on the second agenda item at both of its sessions in 2014 as well as during the intersessional period. It recommended that the Secretary-General use his authority to promote the importance of developing new verification technologies for the non-proliferation of weapons of mass destruction. In this connection, the Board also recommended that he encourage States to share verification technologies with respect to the disarmament of weapons of mass destruction, as long as appropriate mechanisms were put in place. In addition, it was recommended that the Secretary-General encourage all Member States, in appropriate circumstances and with the necessary safeguards in place, to voluntarily share with multilateral organizations information derived from national technical means to enhance verification. These multilateral organizations should, however, ensure the protection of the confidentiality of such information when requested and ensure that the information was corroborated, where possible, using other sources of information. In this regard, information derived from national technical means would remain only supplementary to information from multilateral sources.

The Advisory Board recommended that the Secretary-General make further efforts to foster more active and constructive interaction and cooperation among existing organizations based on extensive verification regimes (especially those of the International Atomic Energy Agency, the Organization for Security and Cooperation in Europe, the Organization for the Prohibition of Chemical Weapons and the Comprehensive Nuclear-Test-Ban Treaty Organization) through information- and experience-sharing to maximize synergy in the conduct of verification activities. The Board also recommended that the Secretary-General consider convening a meeting of the relevant organizations to discuss cooperation. Recognizing the urgent need for capacity-building to ensure that verification procedures were fully implemented, the Board recommended that the Secretary-General encourage Member States with the requisite means to assist other States, in particular developing countries, with capacity-building in the areas of monitoring and verification. The Board noted that the Panel of Government Experts on verification in all its aspects, including the role of the United Nations in the field of verification, had last been convened in 2006. Given a decade of rapid technological developments in the field of verification, notably in remote sensing, communications and information technology, the Board believed that it was an opportune time to establish a new panel. It therefore recommended that the Secretary-General convene a new panel of experts on verification, with a focus on the role of new verification technologies.

Serving as the Board of Trustees of the United Nations Institute for Disarmament Research (UNIDIR), the Advisory Board approved the workplan and budget of the Institute for the period 2014-2015 as well as the submission to the General Assembly of the report of the Director of the Institute on the activities and financial status of UNIDIR.

The Board reviewed the current status of UNIDIR and its programme of work, noting the chronic budgetary situation, the difficulties in securing sustainable funding and the administrative problems resulting from the Institute's relationship with the United Nations. The Board expressed serious concern at the Institute's continued precarious financial situation and the implications of that situation for the existence of the Institute. There was unanimous agreement that the current situation was unacceptable and unsustainable.

During its sixty-first session, in March, the Board agreed to engage, along with the Director, in a comprehensive analysis of the situation of UNIDIR and, thereafter, to present to the Secretary-General options for addressing the issues involved. To that end, the Board's subcommittee on UNIDIR engaged in intersessional work and met as a subcommittee during the sixty-second session.

Concerned by the gravity of the issues facing the Institute and recognizing the need for renewed efforts to address the difficult financial situation and the complex administrative and institutional issues that had arisen, the Board recommitted itself to its responsibilities as outlined in article 3 of the Statute of UNIDIR and made recommendations to ensure the effectiveness and continuity of the Institute's operations.

In this regard, the Board requested the Chair to work with the Director and the Secretariat on a comprehensive description of the issues in order to prepare, in consultation with the Director and the Secretariat, proposals to address the most immediate issues, inform the Board of the proposals and submit them to the Secretary-General for action. The Board also tasked the Chair with preparing, in consultation with the outgoing and incoming Director and the Secretariat, a comprehensive long-term sustainability road map for the Institute. It was agreed that the Board would remain seized of those issues until appropriate solutions had been found.

The Chair offered to the Secretary-General the Trustees' assistance in seeking a resolution to the current financial situation of UNIDIR. In this connection, the Board noted that a revised sustainable funding structure had already been prepared in response to the financial situation.

The Board concluded its deliberations by expressing its appreciation to the Director and the staff of UNIDIR for the outstanding work that they had accomplished under such difficult conditions.

I. Introduction

1. The Advisory Board on Disarmament Matters held its sixty-first session in New York from 5 to 7 March 2014 and its sixty-second session in Geneva from 2 to 4 July 2014. The present report is submitted pursuant to General Assembly resolution 38/183 O. The report of the Director of the United Nations Institute for Disarmament Research (UNIDIR), approved by the Advisory Board serving as its Board of Trustees, has been submitted in document A/69/176.

2. István Gyarmati (Hungary) presided over both sessions of the Board in 2014.

3. The present report summarizes the deliberations of the Board during the two sessions and the specific recommendations it conveyed to the Secretary-General.

II. Substantive discussions and recommendations

A. Disarmament and security implications of emerging technologies

4. At the request of the Secretary-General, the Advisory Board continued its in-depth discussion of the disarmament and security implications of emerging technologies. Members agreed to a comprehensive examination of technical and political elements surrounding emerging technologies of concern, including the potential development of autonomous weapons systems. "Food-for-thought" papers on the topic of emerging technologies were presented by the following members of the Board: Mely Caballero Anthony, Rut Diamint, Pervez Hoodbhoy and Vladimir Yermakov.

5. The Board recognized the complex and often controversial role played by technology in the field of disarmament and non-proliferation. It was agreed that the Board would examine the extent to which emerging technologies had hindered or facilitated the disarmament and international security agenda. Members noted that the exponential development of new technologies had outpaced arms control, creating a number of challenges to the disarmament agenda. It would be useful for the Board to explore these technologies with a view to including new innovations in technological verification.

6. Members of the Advisory Board acknowledged the acceptance of its recommendation that discussion of lethal autonomous weapons be pursued in the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects; the first discussions in the Convention had taken place in March 2014. They emphasized the importance of continuing these discussions and the need to consider important first steps such as definitions before moving forward. The Board also discussed the implications of autonomous weapons systems for international humanitarian and human rights law. The Board noted the challenge of the convergence or blurring of distinctions between chemical weapons and biological weapons or synthetic biology, as an emerging technology. The Board discussed the possibility that such dual control technology could present special challenges, including concerns in terms of international humanitarian and human rights law. The Board recognized the need to discuss the development and use of potentially unsafe systems. It noted, in this connection, the work of UNIDIR to

address these concerns through a project launched in 2014 on lethal autonomous robotics. The project brought together non-political experts to discuss the current and future states of technology as well as related legal and ethical questions.

7. In addressing cybersecurity, the Advisory Board took note of its close link to emerging technologies. The Board agreed that clarification was needed regarding its role in this area in view of work already undertaken by other bodies within the framework of the United Nations. In this regard, it was recommended that the work of the Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security be taken into account in future deliberations of the Board. There was general agreement that while the Board should avoid duplication of effort in the field of cybersecurity, this did not rule out the examination of aspects of that issue that had not yet been addressed by other bodies. Members of the Board believed that the challenges related to cybersecurity constituted global and cross-cutting issues that demanded global and cross-cutting responses.

8. In assessing the issue of emerging technologies, the Board emphasized that it was important to recognize that no single technology had dominated the discussion and that many trends in different fields were converging. It noted, for example, relevant developments in the field of biotechnology, and unmanned aerial vehicles that could be used by actors of concern as delivery vehicles for weapons of mass destruction.

9. **The Board made the following recommendations:**

(a) **With respect to unmanned aerial vehicles, commonly known as drones, the Secretary-General should commission a study to examine the distinction between armed/military drones and unarmed/peaceful/civilian drones, and such ideas as improving transparency in targeted unmanned aerial vehicle strikes as a confidence-building measure and developing a robust oversight and accountability mechanisms for targeted strikes outside active battlefields. The proposed study should also consider international humanitarian law and how relevant principles such as distinction, proportionality and military necessity should be applied, with a view to avoiding excessive injurious or indiscriminate effects;**

(b) **The Secretary-General should consider including in the above-mentioned study a broader range of emerging technologies that might have an impact on international security and the arms control process, including in the field of outer space;**

(c) **The Secretary-General should encourage international and regional organizations to engage in and discuss more actively the complex issue of emerging technologies;**

(d) **The Secretary-General should encourage Member States to take into account their responsibility and obligation to the wider international community when using emerging technologies, given the absence of international regulation in that field. In this connection, he should encourage States to develop and implement inter-State transparency and confidence-building measures with regard to emerging technologies.**

B. Verification, with a special focus on new verification technologies

10. At its sixty-first and sixty-second sessions, held in New York and Geneva in March and July 2014, respectively, the Advisory Board exchanged views on the important role of new technologies in verification activities. During the sessions, "food-for-thought" papers on verification were presented by the following members of the Board: Rut Diamint, Sung-joo Choi and Vladimir Yermakov.

11. Members of the Advisory Board concluded that verification remained a critical element of the negotiation and implementation of arms limitation and disarmament agreements. The Board also concluded that verification, transparency and confidence-building measures were important elements in the context of regional disarmament and non-proliferation agreements.

12. The Advisory Board considered the Sixteen Verification Principles, adopted by consensus in 1988 by the Disarmament Commission and later endorsed by the General Assembly. It concluded that the Principles remained valid and invaluable as a framework for considering the appropriateness and feasibility of new verification technologies, whether applied to existing or future agreements.

13. With regard to nuclear disarmament verification, the Advisory Board noted precedents for nuclear warhead dismantlement verification that could serve as a foundation for future verification. It recognized, however, that many verification challenges remained in the area of warhead dismantlement that would make it difficult at present to completely verify States' declarations. The Board took note of work on the development of practical inspection systems that had met with the satisfaction of the inspecting parties and guaranteed to host States that sensitive information would not be leaked. In this regard, it noted that the initiative of Norway and the United Kingdom of Great Britain and Northern Ireland had broken new ground in demonstrating cooperation between nuclear-weapon and non-nuclear-weapon States.

14. The Advisory Board discussed the potential for new monitoring capabilities such as real-time video and crowd sourcing, but acknowledged potential challenges such as data validation and the meeting of evidentiary and legal standards.

15. The Advisory Board agreed that while verification and its associated technologies were an indispensable element for achieving the goals of disarmament, they could not by themselves address the difficult challenges posed by the proliferation of weapons of mass destruction. Effective verification should include a balance between technology and diplomacy, voluntary cooperation among the countries concerned, and a strong sense of ownership within multilateral verification organizations. One Board member cited, as an example, the high degree of cooperation between the Russian Federation and the United States of America at the technical level involving the sharing of critical information needed to ensure that their bilateral arms limitation agreements were being implemented as required.

16. The Advisory Board also agreed that verification approaches and methods should serve the specific purposes and objectives of the specific conventions for which they had been designed. Most Board members acknowledged the high costs involved in verification and agreed that it should be implemented in a cost-effective manner. A member cautioned that verification should not be abused for extraneous

purposes and that the national security concerns of States should be taken into account in the design of verification systems.

17. In addition, it was agreed that verification approaches and methods could be enhanced by the recent lessons learned in Ukraine, where the extensive use of inspection regimes based on the Vienna Documents of the Organization for Security and Cooperation in Europe (OSCE) had been complemented by observation flights under the international Treaty on Open Skies.

18. The Board acknowledged the challenges posed by the rapid development of science and technologies, including the intangible knowledge transfer that had allowed the development and production of weapons of mass destruction that were undetectable through traditional verification procedures.

19. **The Board made the following recommendations:**

(a) **The Secretary-General should use his authority to promote the importance of developing new verification technologies for the non-proliferation of weapons of mass destruction. In this connection, he should encourage States to share verification technologies with respect to the disarmament of weapons of mass destruction, as long as appropriate mechanisms are put in place;**

(b) **The Secretary-General should encourage all Member States, in appropriate circumstances and with the necessary safeguards in place, to voluntarily share with multilateral organizations information derived from national technical means in order to enhance verification. The multilateral organizations should ensure that the confidentiality of such information is protected when requested and ensure that the information is corroborated, where possible, using other sources of information; information derived from national technical means remains only supplementary to information from multilateral sources;**

(c) **The Secretary-General should make further efforts to foster more active and constructive interaction and cooperation among existing organizations based on extensive verification regimes (especially those of the International Atomic Energy Agency, the Organization for Security and Cooperation in Europe, the Organization for the Prohibition of Chemical Weapons and the Comprehensive Nuclear-Test-Ban Treaty Organization) through information- and experience-sharing to maximize synergy in the conduct of verification activities;**

(d) **The Secretary-General should consider convening a meeting of the relevant organizations to discuss cooperation;**

(e) **Given the urgent need for capacity-building to ensure that verification procedures were fully implemented, the Secretary-General should encourage Member States with the required means to assist other States, in particular developing countries, with capacity-building in the areas of monitoring and verification;**

(f) **The Panel of Government Experts on verification in all its aspects, including the role of the United Nations in the field of verification, was last convened in 2006. Given a decade of rapid technological developments in the field of verification, notably remote sensing, communications and information**

technology, it is an opportune time to establish a new panel. Therefore, the Secretary-General should convene a new panel of experts on verification with a focus on the role of new verification technologies.

III. Presentations by civil society/non-governmental organizations

20. As is customary, the Board heard presentations on issues pertaining to its agenda by representatives of non-governmental organizations and individual experts. At its sixty-first session, the following representatives and experts provided briefings to the Board: David Keir, Programme Director — Verification and Monitoring at the Verification Research, Training and Information Centre (VERTIC); Alexander Glaser, Assistant Professor at the Woodrow Wilson School of Public and International Affairs and the Department of Mechanical and Aerospace Engineering at Princeton University; and Peter Asaro, Director of Graduate Programmes in Media Studies at the New School for Public Engagement. Additionally, Mark Gubrud, a physicist and independent expert on emerging technology and human security, briefed the Board on emerging technologies.

21. At its sixty-second session, the Board heard a presentation on emerging technologies by Maya Brehm of the Campaign to Stop Killer Robots, an international coalition of non-governmental organizations working to ban fully autonomous weapons.

IV. Board of Trustees of the United Nations Institute for Disarmament Research

22. At its sixty-first and sixty-second sessions, the Advisory Board, serving as the Board of Trustees of UNIDIR, had a long and substantive discussion on the situation of the Institute. At both sessions, the Director of UNIDIR, Theresa Hitchens, gave comprehensive accounts of the current status of UNIDIR and of its programme of work. The Director provided details of the Institute's chronic budgetary situation and the negative impact it had had on the work of UNIDIR. The Director addressed the severe difficulties she had experienced in securing sustainable funding for the Institute and some of the administrative problems resulting from its relationship with the United Nations that had rendered fundraising problematic. The Board expressed serious concern at the continued precarious financial situation of UNIDIR, which had continued over a long period, potentially threatening its very existence. There was unanimous agreement that the current situation was unacceptable and unsustainable.

23. The Board underlined that UNIDIR had provided distinguished service to the United Nations and the international community in the field of disarmament research. It deserved to be supported in a manner that truly reflected this contribution.

24. Trustees emphasized that they were also very concerned at the fact that UNIDIR had had administrative burdens imposed on it by the United Nations without necessarily receiving equivalent benefits or services in return. The Board believed that the inflexible administrative and financial regulations had made it difficult for UNIDIR to obtain and use financial contributions.

25. The Chair offered to the Secretary-General the Trustees' assistance in seeking a resolution to the current financial situation of UNIDIR with a view to ensuring its continuing existence and services for many years to come. The Director noted that the Institute had already prepared a revised sustainable funding structure based on the paper submitted to the Board and the Deputy Secretary-General in 2013.

26. During its sixty-first session, in March, the Board agreed to engage, along with the Director, in a serious analysis of the situation of UNIDIR, including the funding crisis, administrative issues and institutional processes. The Board also agreed to present to the Secretary-General a number of options for addressing those issues. To that end, the Board's subcommittee on UNIDIR, consisting of Mr. Gyarmati (Chair), Mr. Yermakov, Wael al-Assad, Fred Tanner and Ms. Caballero Anthony, engaged in intersessional work on the above-mentioned issues and met as a subcommittee during the sixty-second session of the Board.

27. During its sixty-second session, the Board heard the report of the Chair of the UNIDIR subcommittee on the question of the administrative oversight of the Director. The Trustees decided to work with UNIDIR to seek a solution over the next six months.

28. The Board heard the reports of the Chair of the subcommittee and the Director of UNIDIR and expressed concern at the gravity of the long-standing, intractable issues facing the Institute. Given that the Institute was now in a period of transition, the Trustees believed that it was critical to renew efforts to address the difficult financial situation and the complex administrative and institutional issues that had arisen. The Board therefore recommitted itself to its responsibilities as outlined in article 3 of the statute of UNIDIR, specifically, making appropriate recommendations with a view to ensuring the effectiveness of the Institute's operations and their continuity.

29. In this regard, the Board tasked the Chair with:

(a) Preparing, in cooperation with the Director and the Secretariat, a detailed and comprehensive description of the issues at hand, providing the Board with the results, and informing the Secretary-General;

(b) Preparing, in consultation with the Director and the Secretariat, proposals to address the most immediate issues, informing the Board, and submitting the proposals to the Secretary-General for action;

(c) Preparing, in consultation with the outgoing and incoming Directors and the Secretariat, a comprehensive road map to address the long-term sustainability of the Institute;

(d) Remaining seized of those issues until appropriate solutions have been found, including, as provided in article III, paragraph 2 (e), of the statute of UNIDIR, taking such other decisions as are deemed necessary for the effective functioning of the Institute.

30. The Board approved the workplan and budget of UNIDIR for the period 2014-2015 as well as the Director's report to the General Assembly on the activities and financial status of the Institute. The Board expressed its appreciation to the Director and the staff of UNIDIR for the excellent work that they had accomplished under very difficult circumstances. The Board expressed its wholehearted gratitude to the

departing Director, Theresa Hitchens, wishing her well in her professional and private life.

V. Future work

31. The members of the Advisory Board exchanged views on a number of possible topics for discussion at its 2015 sessions. Possible areas of future work included looking into the possible role of arms control in conflict prevention and management and in post-conflict situations and an examination of the humanitarian effects of the use of nuclear weapons. Other possible areas of future work included examining topics such as the strengthening of multilateral norms on the disarmament and non-proliferation of weapons of mass destruction; emerging conventional weapons and their impact on international security; and asymmetric conflicts and new challenges to disarmament.

VI. Conclusion

32. During its two sessions in 2014, the Advisory Board concluded deliberations on the two items on its agenda: disarmament and security implications of emerging technologies; and verification, with a special focus on new verification technologies. It provided a set of recommendations to the Secretary-General on each of those items. Serving as the Board of Trustees of UNIDIR, the Board reviewed the research activities of the Institute, focusing on serious ongoing administrative and funding challenges. The Board completed the selection process for the appointment of a new Director of the Institute and submitted its recommendation to the Secretary-General.

Annex

Members of the Advisory Board on Disarmament Matters

István Gyarmati (Chair)
Ambassador, Professor
President, Centre for Democracy Public Foundation
Head of the International Centre for Democratic Transition
Budapest

Wael al-Assad
Ambassador, Representative of the Secretary-General for Disarmament and Regional Security and Director of Multilateral Relations, League of Arab States
Cairo

Mely Caballero Anthony
Associate Professor and Head of the Centre for Non-Traditional Security Studies, S. Rajaratnam School of International Studies, Nanyang Technological University
Singapore

Choi Sung-joo
Ambassador for International Security Affairs, Ministry of Foreign Affairs and Trade
Seoul

Rut Diamint
Professor of International Relations, Universidad Torcuato Di Tella
Buenos Aires

Trevor Findlay
Professor, William and Jeanie Barton Chair in International Affairs, Norman Paterson School of International Affairs
Ottawa

Anita Friedt
Principal Deputy Assistant Secretary for Nuclear and Strategic Policy, Bureau of Arms Control, Verification and Compliance, Department of State
Washington, D.C.

Vicente Garrido Rebolledo
Professor, King Juan Carlos University
Director, International Affairs and Foreign Policy Institute (INCIPE)
Madrid

Camille Grand
Director, Foundation for Strategic Research
Chair, EU Non-Proliferation Consortium
Paris

Pervez Hoodbhoy
Professor, School of Science and Engineering, Lahore University of Management Sciences, and Quaid-i-Azam University
Islamabad

Eboe Hutchful
Professor, Africana Studies, Wayne State University
Detroit

Togzhan Kassenova
Associate, Nuclear Policy Programme, Carnegie Endowment for International Peace
Washington, D.C.

Fred Tanner
Ambassador, Senior Adviser to the Secretary-General of the Organization for Security and Cooperation in Europe/Liaison, Swiss chairmanship of the Organization for Security and Cooperation in Europe, 2014
Vienna

Wu Haitao[a]
Ambassador Extraordinary and Plenipotentiary for Disarmament Affairs and Deputy Permanent Representative of China to the United Nations Office at Geneva and other International Organizations in Switzerland
Geneva

Vladmir I. Yermakov
Deputy Director, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs of the Russian Federation
Moscow

Theresa Hitchens (ex officio member)
Director, United Nations Institute for Disarmament Research
Geneva

[a] Participated in the sixty-second session of the Board.